

## HUMANSIDE

### Germane Systems expansion integrates process, people

By Jeff Kohler

Virginia's Philpott Manufacturing Extension Partnership

**F**or Marc and Kerry Green of Germane Systems, a philosophy and culture of doing the right thing for their customers, industry partners and employees has paid off handsomely. Since its founding in 1997, the company has experienced tremendous revenue growth, from \$650,000 in the first year to a projected \$30 million in 2006.

The key to success has been a strongly enshrined customer focus. The mission statement reads: "In everything we do, keep our compass pointed at our customer." Germane takes a long-term view of customer relationships. "We see each customer as our best customer five years from now," said Marc Green, Germane's founder and CEO. To him, that means doing what is best for the customer. And that can be the most difficult, he acknowledges. He also believes in treating everyone he works with as a partner, including customers, suppliers and employees.

Chantilly, VA-based Germane Systems is an original equipment manufacturer of high-end business, government and military network computer servers. Marc began the business manufacturing servers for Web-hosting centers. Referring to the first phase of his company's history as the "commercial," Marc Green designed and built the rack-mount chassis for the servers, using commercial, off-the-shelf components. At the height of the dot-com era in the late 1990s with the great demand for Internet access, Germane had 30 corporate clients, five employees and

1,800 square feet of commercial warehouse space.

According to Marc Green, customers can deploy an off-the-shelf solution with less expense, less delay and more flexibility. "We can insert and update technology more quickly," he said, "and ride the technology curve." By using off-the-shelf electronic components for the servers, he is able to keep costs down for his customers.

Germane president Kerry Green stressed the importance of the company's back-end processes to making the company's

vision work. She focused on Germane's internal operations and infrastructure. About one-third of Germane's more than 75 employees are in manufacturing, while the others are in sales, support and engineering design.

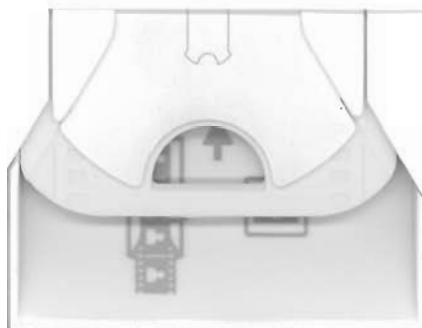
"Our goal is to get out a perfect order – the right product to the right location on time," said Kerry.

Germane's relationship with Virginia's Philpott Manufacturing Extension Partnership (VPMEP), an affiliate of the NIST Manufacturing Extension Partnership, began

in March 2004. VPMEP provided business and technical assistance in ISO 9000 certification and a workflow layout for Germane's new facility, along with Lean training. "The culture instilled by the management team at Germane makes project implementation more effective and even fun at a company that's growing so fast," says Robert Schwabik, practice manager for quality management system and field project manager with VPMEP.



Germane Systems employee assembles internal server components.



## Beginning the process

Schwabik began the ISO project at Germane by briefing the management on the ISO 9000 certification process. "We then established the implementation team and provided training on the standard and how to write the ISO documentation," he said. Schwabik attended the ISO team meetings as coach, trained the audit team and performed a pre-assessment audit. Germane expects to have its ISO 9000 certification this year.

During this period, Germane's growth exceeded the capacity of the two buildings and the Greens decided to expand. VPMEP was called in to provide design input for the layout of the new facility. Construction began in 2004 and was completed in 2005. Previously, the offices and laboratory were housed in one building and manufacturing was in another. Now, the entire company was together in a 61,000 square-foot building.

Applying his industrial engineering expertise, Mark Oakes, a project manager with VPMEP, worked with Germane to come up with a layout design that would maximize materials flow, allow for expansion and be aesthetically pleasing. He first met with department representatives to identify relationships among departments and processes. "This input helped us to determine how close one department needed to be to another," he said. "Once we had the relationships established, we calculated how much square footage would be required for

each area and where departments needed to be to maximize flow."

## Understanding Lean

Oakes presented two block layout diagrams to Germane for consideration. The layout indicated the locations of the main manufacturing functions, the key pieces of equipment and the office space. A final footprint for the new facility was selected. Kerry Green said Germane is now operating more efficiently in one facility.

As part of her focus on doing it right in-house, Kerry has been interested in applying Lean concepts to Germane's operations.

"We wanted to eliminate waste, communicate more easily and effectively, and make our inventory easily accessible," she said.

Schwabik conducted an all-day Lean training session for Germane management. Integrating the concepts of Lean with quality management, he introduced the concepts of 5s – "everything in its place and a place for everything" – for making the workplace safer and more orderly.

As a result, employees can work at any of Germane's 55 workstations and have all of the basic tools that they need. Germane also has held several Kaizen events.

"We make sure that there's the proper inventory at the place of build so that there's no wasted time," Kerry Green

said. "We try to minimize the inventory level in order to stay agile. We don't pre-build anything."

A strong believer in the Lean philosophy, Kerry is working to have the entire Germane staff understand Lean. "It does make sense and makes everyone's life easier," she says. She has also implemented a continuous improvement process, making minor course corrections all along. "We want to focus now on managed change," she states. And VPMEP's Bob Schwabik is looking forward to doing more Lean projects with Germane.

The name of the company – Germane – has particular relevance for Marc and Kerry Green. As they explain, the word means "focused, specific, cogent" – an apt description of the way they do business and the basis for their phenomenal success. **PE**

*Jeff Kohler is the Executive Director of Virginia's Philpott Manufacturing Extension Partnership (VPMEP). He can be reached at (276) 666-8890, ext. 224 or via e-mail at [jkohler@vpmepp.org](mailto:jkohler@vpmepp.org). Information about VPMEP can be found at its Web site: [www.vpmepp.org](http://www.vpmepp.org).*

*The Manufacturing Extension Partnership is a program of the National Institute of Standards and Technology, Gaithersburg, MD. Information can be found at its Web site: [www.mep.nist.gov](http://www.mep.nist.gov). Inquiries can be sent via e-mail to [mfg@nist.gov](mailto:mfg@nist.gov).*

Reprinted from Plant Engineering, June 2006. Copyright © Reed Business Information, a division of Reed Elsevier, Inc. All rights reserved.

Page layout as originally published in Plant Engineering has been modified.

#1-17258057 Reprinted by Reprint Management Services, 717.399.1900. To request a quote online, visit [www.reprintbuyer.com](http://www.reprintbuyer.com)



MANUFACTURING  
EXTENSION  
PARTNERSHIP™

National Institute of Standards and Technology  
Technology Administration, U.S. Department of Commerce  
100 Bureau Drive, Stop 4800  
Gaithersburg, Maryland 20879-4800

(301) 975-5020  
[www.mep.nist.gov](http://www.mep.nist.gov)  
[mfg@nist.gov](mailto:mfg@nist.gov)



Solutions for a better way  
in collaboration with Virginia Tech

